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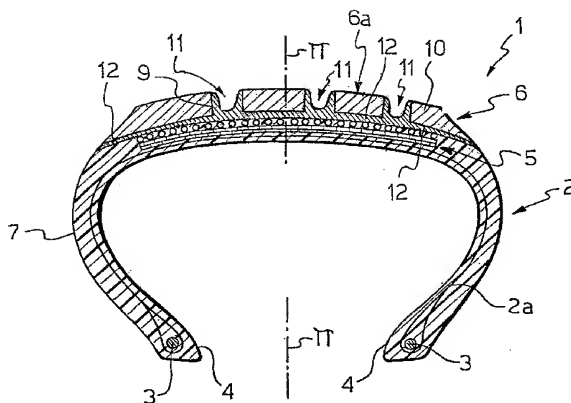
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(54) Title: PNEUMATIC TIRE AND PROCESS FOR ITS MANUFACTURE



(57) Abstract: A pneumatic tire (1) is described comprising a carcass structure (2) having at least one carcass ply (2a), and at least one annular reinforcing structure (3) associated to the carcass ply (2a), a tread band (6) made of an elastomeric material at a radially outer position with respect to the carcass structure (2), a belt structure (5) interposed between the carcass structure (2) and the tread band (6) and a pair of axially opposite side walls (7, 8) on said carcass structure (2), wherein the tread band (6) comprises: i) at least one first sector (9), radially extending, substantially consisting of a first elastomeric material; ii) a plurality of second sectors (10), radially extending, positioned at axially opposite sides of said at least one first sector (9) and substantially consisting of a second elastomeric material; iii) at least one longitudinal groove (11) formed in said at least one first sector (9) and extending substantially for the entire circumferential development of the tread band (6); wherein the first elastomeric material has a modulus of elasticity ( $E'$ ) under compression at 23°C greater than the modulus of elasticity ( $E'$ ) under compression at 23°C of the second elastomeric material, and wherein the modulus of elasticity ( $E'$ ) under compression at 23°C of the first elastomeric material is comprised between about 20 and about 80 MPa.

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